

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method comprising:
introducing an etch stop layer over a substrate;
introducing a base layer over the etch stop layer;
introducing a dielectric cap layer over the base layer between an interconnection line and a contact point on the substrate, the dielectric cap layer comprising a plurality of different material layers, wherein each respective layer of the plurality of different material layers is selectively etchable with respect to the etch stop layer;
introducing a photoimageable material over the dielectric cap layer; and
patterning an interconnection to the contact point, wherein the dielectric cap layer is configured to suppress substrate reflections during patterning.
2. (Original) The method of claim 1, wherein patterning an interconnection to the contact point comprises patterning an interconnection directly to a device on the substrate.
3. (Previously Presented) The method of claim 2, wherein introducing the dielectric cap layer comprises introducing a plurality of alternating material layers.
4. (Previously Presented) The method of claim 3, wherein the introducing the dielectric cap layer comprises introducing silicon dioxide as an ultimate layer.
5. (Original) The method of claim 4, wherein introducing a plurality of alternating material layers comprises alternating silicon dioxide layers with at least one other material layers.
6. (Original) The method of claim 5, wherein the number of alternating silicon dioxide layers comprises at least six.

7. (Previously Presented) The method of claim 1, wherein the dielectric cap layer comprises a first dielectric layer, the method further comprising introducing a second dielectric layer between the first dielectric layer and the etch stop layer.

8. (Currently Amended) A method comprising:

introducing an etch stop layer over a substrate;

introducing a dielectric layer over the etch stop layer between an interconnection line and a contact point on the substrate, the dielectric layer comprising a plurality of layer portions of alternating material layers; and

patterning an interconnection to the substrate, wherein the ~~dielectric thickness and composition of each of the layer portions comprising the dielectric layer is~~ are selected so that the dielectric layer configured to suppresses substrate reflections during patterning.

9. (Original) The method of claim 8, wherein the interconnection line comprises a first level interconnection line.

10. (Currently Amended) The method of claim 9, wherein introducing a plurality of layer portions of alternating material layers comprises introducing silicon dioxide as an ultimate material layer portion.

11. (Currently Amended) The method of claim 10, wherein introducing a plurality of layer portions of alternating material layers comprises alternating silicon dioxide ~~layers~~ layer portions with at least one other material ~~layers~~ different than silicon dioxide.

12. (Original) The method of claim 11, wherein the number of alternating silicon dioxide ~~layers~~ layer comprises at least six.

13. (Original) The method of claim 8, wherein the dielectric layer comprises a first dielectric layer, the method further comprising introducing a second dielectric layer between the first dielectric layer and the substrate.

14. (Withdrawn) An apparatus comprising:
a substrate comprising a plurality of devices formed thereon; and
an interlayer dielectric layer comprising a base layer and a cap layer, the cap layer comprising a plurality of alternating material layers overlying the substrate.

15. (Withdrawn) The apparatus of claim 14, wherein the cap layer comprises silicon dioxide as the ultimate material layer.

16. (Withdrawn) The apparatus of claim 14, wherein the cap layer comprises a plurality of silicon dioxide layers alternated with at least one other material layers.

17. (Withdrawn) The apparatus of claim 16, wherein the number of alternating silicon dioxide layers comprises at least six.

18. (Previously Presented) The method of claim 1, further comprising introducing a photoimageable material layer, wherein the dielectric layer comprising the plurality of different material layers is introduced between the substrate and the photoimageable material layer.

19. (Canceled)

20. (Previously Presented) The method of claim 1, wherein the dielectric layer comprising the plurality of different material layers is introduced between the etch stop layer and the photoimageable material layer.

21. (Previously Presented) The method of claim 8, further comprising introducing a photoimageable material layer, wherein the dielectric layer comprising the plurality of layer portions of alternating material layers is introduced between the substrate and the photoimageable material layer.

22. (Canceled)

23. (Currently Amended) The method of claim 8, wherein the dielectric layer comprising the plurality of layer portions of alternating material layers is introduced between the etch stop layer and a photoimageable material layer.

24. (Previously Presented) The method of claim 1, wherein the etch stop layer is silicon nitride.

25. (Previously Presented) The method of claim 8, wherein the etch stop layer is silicon nitride.

26. (Currently Amended) The method of claim 1, wherein the plurality of layer portions of alternating different material layers includes at least one layer of silicon oxynitride.

27. (Currently Amended) The method of claim 8, wherein the plurality of layer portions of alternating material layers comprises alternating silicon oxynitride layers with at least one other material layer.

28. (Currently Amended) A method comprising:
forming a planarized base layer over a substrate having a plurality of devices;
forming a dielectric cap layer over the base layer, wherein the dielectric cap layer is formed by alternating a first material layer and a second material layer having a higher dielectric constant than the first material layer, wherein the first material layer is more than five times thicker than the second material layer; and
patterning an interconnection to a contact point, wherein the dielectric cap layer is configured to suppress substrate reflections during patterning.

29. (Previously Presented) The method of claim 28, wherein the base layer is doped with phosphorous or boron to serve as a collector of metallic contaminants.